

A NEW SPECIES OF PROBOSCIDEA (MARTYNIACEAE)  
FROM BAJA CALIFORNIA, MEXICO

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Annetta Carter recently asked me to annotate some specimens of *Proboscidea* which she had collected in Baja California. Besides *P. altheifolia* (Benth.) Decne., a yellow-flowered, tuberous-rooted perennial, these included a purple-flowered annual superficially resembling *P. parviflora* (Woot.) Woot. & Standl. Careful study, including comparison with the type specimens of all described species of the genus, convinced me that the latter specimens represent a new species endemic to the Sierra de la Giganta of Baja California. This new species is described below and compared with the other annual species from the Sonoran Desert (fig. 1).

*Proboscidea gracillima* Hevly, sp. nov. Herba annua, glandulosa ad viscido-pubescent, ramosissima, ad circa 3 dm lata et 4.5 dm alta; folia opposita vel alterna, ovata vel deltoida, basibus cordatis, marginibus integeris vel inaequaliter dentatis, petiolis 5–10 cm longis; racemi terminales, 3–5—floribus, pedicellis per anthesin tenuissimis, circa 2.5–3.5 cm longis, sed maturitate crescentibus ad circa 4 cm longitudine; calyx 0.9–1.4 cm longus, 5—lobatus, ad basim ventraliter fissus, basi bracteo-  
lis duabus, ovatis vel oblongis; corolla oblique infundibularis, 2.4–3.5 cm longa, limbo 5 lobato, 1.6–3.0 cm lato, luteo-violaceo; stamina fertilia 4, didynama, quinto rudimentario; stylus stamina superans; stigmata duo; fructus ovatus, circa 9 cm longus.

Viscid to glandular pubescent annual herb arising from a well-developed tap root with fibrous secondaries; stems 30–45 cm in height, the branches and leaves opposite or subopposite; petioles 5–10 cm long, glandular-pubescent on the nerves below; basal leaves 3.75–6.75 cm long and 3.25–6.50 cm wide, broadly ovate to deltoid, entire or with a very shallowly undulate (sinuate) margin; inflorescence racemose, 10–18 cm long, only one- or two-flowered at any one time but ultimately producing about 20 flowers, pedicels in anthesis erect to ascending, 2.5–3.5 cm long, 1 mm thick but becoming reflexed, thicker (2–3) mm, and longer (up to 4 cm) in fruit; bracts 2, broadly ovate, oblong or falcate, 4–5 mm long and 2–3 mm broad; calyx thin, papery 0.9 to 1.4 cm long and 1.0 cm broad, 5 lobed, the terminal lobe extended, the lateral lobes 3–5 mm wide, the intermediate and basal lobes 9 to 1.3 mm long, the sinus  $\frac{1}{2}$  to  $\frac{1}{3}$  the length of the calyx; corolla 2.4–3.5 cm long, strongly ventricose, (dorsal and ventral measurements differing by as much as 1 cm), the narrow portion of the tube 0.5–1.0 cm long, the flaring portion 1.5–2.5 cm long and 1.1 to 2.0 wide at the mouth, reddish purple



FIG. 1. Holotype of *P. gracillima*. A young specimen with immature fruit.

externally. Yellowish purple within, with conspicuous purple dots, a pronounced yellow band extending somewhat over the lower lobe, the limb 1.6–3.0 cm broad, reddish purple, the upper lobes maroon, the lobes 0.5–1.0 cm long and 0.7–1.2 cm broad; stamens 4, didynamous; ovary 1 celled with two parietal placentae, style exceeding the stamens, stigmas 2, ovate and sensitive; fruit an ovate to elliptical ligneous drupe 4–5 cm long with a prominent dorsal crest and horns 4–5 cm long; seeds numerous (fig. 1).

TABLE 1. A COMPARISON OF *P. GRACILLIMA*, *P. PARVIFLORA*, AND *P. SINALOENSIS*.

	<i>P. gracillima</i>	<i>P. parviflora</i>	<i>P. sinaloensis</i>
Geographic Distribution	Sierra de la Giganta, Baja California, Sur	Arizona, New Mexico, Trans-Pecos Texas and adjoining Mexico	Coastal plains of Sinaloa and S. Sonora, Mexico
Leaves	Generally less than 7 cm long and wide, entire	Generally more than 12 cm long and wide, shallowly lobed and frequently dentate	Generally more than 12 cm long and wide, with 3-5(-7) palmate lobes
Inflorescence	Surpassing the foliage	Equalling or surpassed by the foliage	Surpassing the foliage
Corolla Length	2.4 - 3.5 cm	2.0 - 4.0 cm	3.75 - 7.00 cm
Corolla Color	Reddish purple, upper lobes maroon	Reddish purple to pinkish lavender or rarely ivory; purple blotches may be present on upper lobes	Pinkish lavender, large maroon blotch may be present in upper lobes
Corolla Throat Ornamentation (internal)	Conspicuous reddish purple blotches extending the length of the tube and across the base of the tube, but not across the base of the dorsal lobes, not forming distinct rows	Conspicuous reddish purple blotches absent.	Conspicuous reddish purple blotches extending the length of tube and across the base of the tube but not across the base of the dorsal lobes, more or less forming two rows
Filaments	Glabrous or sparsely villous at and below their point of attachment; the arcuately curved portion glutinous and conspicuously glandular	Glandular at and below their point of attachment, the arcuately curved portion glabrous	Pilose-villous at, below, and occasionally above their point of attachment, the arcuately curved portion not noticeably glutinous and essentially eglandular

Type. Mexico: Baja California, Mesa del Potrero de San Javier (north-east of Mission San Javier), *Carter 4993* (MEX, UC-holotype), Sept. 20, 1965.

Other collections. Sierra de la Giganta, *Carter 3137* (UC), *Carter 4478* (UC), *Carter 5289* (UC). These and the type came from elevations between 500 and 700 m. North of Comondu, *Hammerly 179* (DS, UC).

*Proboscidea gracillima* belongs to section *Proboscidea* (=Sect. *Euproboscidea* Stapf) (Stapf, 1895), characterized by annual habit and purplish, reddish, pinkish, or whitish flowers. It is most similar to *P. parviflora* vegetatively and keys to that species in the most recent revision of the genus (Van Eseltine, 1929). In internal throat ornamentation and in inflorescence, however, it shows some affinity to *P. sinaloensis* Van Eselt. All three species have small calyces and may be distinguished by leaf shape, inflorescence characteristics, corolla size and color, and filament pubescence, as well as by geographical distribution (table 1).

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#### LITERATURE CITED

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## A NEW ASTRAGALUS (FABACEAE) FROM NEVADA

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*Astragalus phoenix* Barneby, sp. nov., in sect. *Argophyllis* juxta *A. newberryi* Gray a quo habitu multicipiti late pulviniformi nec simplicius caespitoso, pube crasse tomentoso-pilosa candidissima, racemisque brevissime pedunculatis 1—2 (nec 3—8)-floris absimilis inserenda.

Diu perennis subacaulescens e radice perpendiculari valida, caudicis iteratim ramosi ramulis superne stipulis petiolisque marcidis crebre obitis columnaribus, demum pulvinos hemisphaericos vel depresso-convexos ad 4—5 dm usque latos efformantibus, tota pilis patulis rigidiusculis (minime gossypinis) ad 0.8—1.3 mm longis piloso-tomentosa cana; stipulae crebre imbricatae ovatae acutae vel breviter acuminatae 2—3 mm longae, extus tomentosae, intus glabrae venosae; foliorum 1.5—3.5(4) cm longorum petiolus rigidus marcescens, foliola 1—4-, saepissime 2 vel 3-juga ovata vel obovata (2)3—6(7) mm longa secus rachin 2—10(15) mm longum conferta, mox decidua; pedunculus utriusque ramuli unicus erectus brevissime 1—2-florus 2—5 mm longus stipulis fulcrantibus ad maximum duplo longiribus; calycis laxe pilosuli 12.5—